

TWO NEW SPECIES OF *MACROTRISTRIA* STÅL (HEMIPTERA: CICADIDAE) FROM QUEENSLAND

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*Australian Museum, P.O. Box A285, Sydney South, N.S.W., 2000***Abstract**

Two new species of *Macrotristria*, *M. lachlani* sp.n. and *M. vittata* sp.n., are described from specimens taken on Cape York Peninsula, northern Queensland.

Introduction

Burns (1964) revised the Australian endemic genus *Macrotristria* Stål, listing 22 species including six which he described as new. Two were later sunk in synonymy; 21 species are now recognised in the genus, including 10 from Queensland (Moulds 1990). In this paper I describe two additional species, both of which are known only from Cape York Peninsula, northern Queensland.

The following abbreviations are used: AM, Australian Museum, Sydney; ANIC, Australian National Insect Collection, Canberra; MSM, author's collection; QM, Queensland Museum, Brisbane.

***Macrotristria lachlani* sp. n.**

Types. Queensland: *Holotype* ♂, 2 km S of Hann R. x-ing, 80 km NW of Laura, Cape York Pen., 5.i.1988, M.S. & B.J. Moulds (AM). *Paratypes*: 15♂♂, 18♀♀, (2♂♂, genitalic preparations MA1 and MA3), same data as holotype (1♀ AM, 1♂, 1♀ QM, 1♂, 1♀ ANIC, remainder MSM); 2♂♂, 1♀, Punsand Bay, Cape York Pen., 15,16.i.1987, R.B. Lachlan (MSM).

Male (Figs 1, 3, 4). *Head* orange-brown, sometimes greenish, with black or dark brown markings as follows: each ocellus encircled with black; a black fascia against inner margin of each eye; a dark brown fascia along leading edge of head terminating short of postclypeus; usually a black spot each side of ocellus cluster, these spots sometimes developed into a black fascia from lateral ocellus to leading edge of head; a small black dot usually present on dorsal posterior margin about mid way between dorsal midline and eye. Postclypeus dull red; anteclypeus similarly coloured but usually partially black laterally. Rostrum brown at base, remainder tending blackish, reaching base of hind coxae. Antennae black. *Thorax*. Similar in colour to head. Pronotum with a pair of paramedian dark brown fasciae that become black and meet at pronotal collar; fissures usually marked by black; pronotal collar paler than remainder of pronotum, or green. Mesonotum with a paramedian pair of subconical black fasciae based on anterior margin and extending posteriorly about half-way to cruciform elevation; a somewhat similar but larger marking on each side of paramedian pair but these usually deeply excavated along their inner margins; a black fascia adjacent to anterior of cruciform elevation. Wings hyaline; venation brown or green, tending black distally. Fore wing usually with a weak infuscation overlying all or some veins at bases of apical cells 2-4; costa either orange-brown or green to node; basal cell entirely or substantially pigmented orange-brown; basal membrane orange. Hind wing anal lobe variably opaque orange-brown alongside veins 2A and 3A. Legs dark brown with distal end of mid and hind coxae and hind tibiae and tarsi noticeably pale. Opercula broad and rounded, slightly overlapping, confined to margins of

tympanal cavities; usually black or nearly so, sometimes with a small pale area on postero-lateral margin, occasionally almost entirely brown. *Abdomen* with tergites brown and black, the brown confined to posterior margin of each segment but often expanded dorsally and restricted laterally, becoming paler towards abdominal apex. Tymbal covers substantially black with just a small pale area of variable extent dorsally. Sternites blackish, especially medially; sternite VII light brown, sternite VIII light brown with a broad black central area not reaching apex.

Genitalia (Figs 3, 4). Pygofer brown or greenish, always black on apical spine and along basal margin, especially subdorsally but sometimes also dorsally, black also along ventral margin broadest towards base. Basal lobes small, in lateral view terminating in a rounded apex. Uncus black, in lateral view strongly downcurved with apical half more or less straight, in dorsal view slightly expanded distally and terminating in a blunt point; slightly depressed dorsally, slightly excavated ventrally. Aedeagus tubular with a pair of slender, simple appendages arising opposite each other near apex.

Female. Coloration and markings similar to male. Abdominal segment 9 ringed with black basally to varying degrees, sometimes the black absent dorsally but always with one or two finger-like extensions laterally; apical spine brown. Ovipositor sheath black, terminating about level with apex of apical spine.

Dimensions. Range and mean (in mm) for 10 ♂♂ and 10 ♀♀ (including largest and smallest of available specimens). Length of body: ♂ 31.1-35.9 (mean 33.53), ♀ 30.1-34.8 (mean 32.51). Length of fore wing: ♂ 43.6-47.0 (mean 44.95), ♀ 41.6-47.0 (mean 44.23). Width of head: ♂ 14.0-15.6 (mean 14.46), ♀ 13.6-15.6 (mean 14.47). Width of pronotum: ♂ 13.1-15.0 (mean 13.84), ♀ 12.9-14.7 (mean 13.75).

Nymphal exuviae (Fig. 7).

Light golden brown, glossy but not highly so, posterior 1/4 or so of abdominal tergites slightly darkened. Fore leg with apical tooth of tibia very long and slender, gently curved, extending more than 3/4 length of tarsus; posterior tooth of femur long, slender and almost straight; intermediate tooth of femur short; femoral comb with 6 regular teeth. Body length ♂ 27.4-29.9 mm (n = 4); ♀ 29.0-29.4 mm (n = 2).

Etymology

Named in honour of Mr Robert Lachlan who collected the original specimens.

Comments

M. lachlani is a distinctive species unlike any other *Macrotristria*; the rich orange-brown basal cell of the fore wing is unique in the genus.

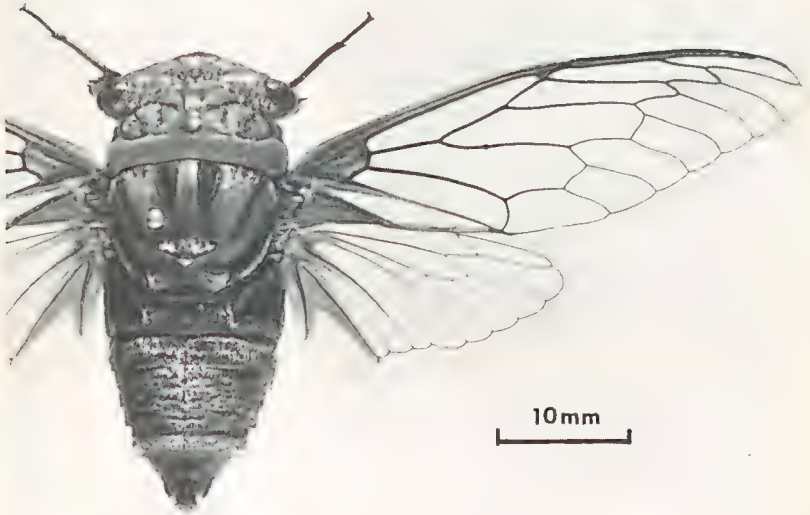
Adults were found on tall, scattered *Pandanus* in open forest.

Distribution

Known only from Punsand Bay near Cape York and near the Hann River crossing, 80 km NW of Laura, Cape York Peninsula.

***Macrotristria vittata* sp.n.** (Figs 2, 5, 6, 8)

Types. Queensland: Holotype ♂, upper Jardine R., Cape York Pen., 11°18'S 142°37'E, 22.x.1979, M.S. & B.J. Moulds (AM). *Paratypes*: 1 ♀, same data as holotype; 2 ♂♂ (one genitalic preparation MA4), same data as holotype but 11°14'S, 142°38'E, 16.x.1979 (MSM).



1



2

Figs 1-2. Adult ♂♂, dorsal view: (1) *Macrotristria lachlani* sp.n.; (2) *M. vittata* sp.n.

Male (Figs 2, 5, 6). *Head* green, usually with a brownish tinge towards eyes; ocelli surrounded by black in a complex pattern; black along posterior margin adjacent to eyes. Postclypeus dark brown with a large median area dorsally green or yellowish brown; an indistinct black spot at distal end of the green or yellowish brown. Anteclypeus black with midline partly or entirely brown. Rostrum brown at base, remainder black, reaching base of hind coxae. Antennae black. *Thorax*. Pronotum brown with dorsal midline and pronotal collar green; fissures and posterior margin adjacent to pronotal collar black; an indistinct black fascia between anterior oblique fissure and pronotal collar. Mesonotum dark brown with wing grooves and cruciform elevation green; an indistinct paramedian pair of subconical black fasciae based on anterior margin, these appearing essentially in outline only; an even more indistinct but larger subconical black marking on each side of paramedian pair; anterior side of cruciform elevation bearing an indistinct black fascia. Wings hyaline; venation brown or green becoming black distally. Fore wings without infuscation; costa green or brown to node; basal cell green along anterior margin; basal membrane grey. Hind wings with opaque, off-white pigmentation on anal lobes alongside veins 2A and 3A. Legs dark brown with all femora, coxae and hind tibiae and tarsi yellowish. Opercula broad and rounded, slightly overlapping, confined to margins of tympanal cavities; orange-yellow. *Abdomen* with tergites black or nearly so except for yellow on posterior half or more of tergites 7 and 8, all tergites muddy yellow ventrally, tergite 3 with a large patch of silver pubescence laterally, sometimes also extending to tergite 4; tymbal covers black. Sternites muddy yellow with black median band, sternite VII yellow usually with black base and thin black midline; sternite VIII yellow, usually with thin black midline.

Genitalia (Figs 5, 6). Pygofer yellow with black apical spine and a black basal band; basal lobes in lateral view evenly rounded. Uncus yellow, in lateral view robust and strongly downcurved, in dorsal view narrowing distally with apex incurvate. Aedeagus tubular with a pair of slender simple appendages arising opposite each other near apex.

Female. Coloration and markings similar to male. Abdominal segment 9 golden brown, substantially black basally except for ventral surface and with black apical spine and narrow black outer margin. Ovipositor sheath black, terminating about level with apex of apical spine.

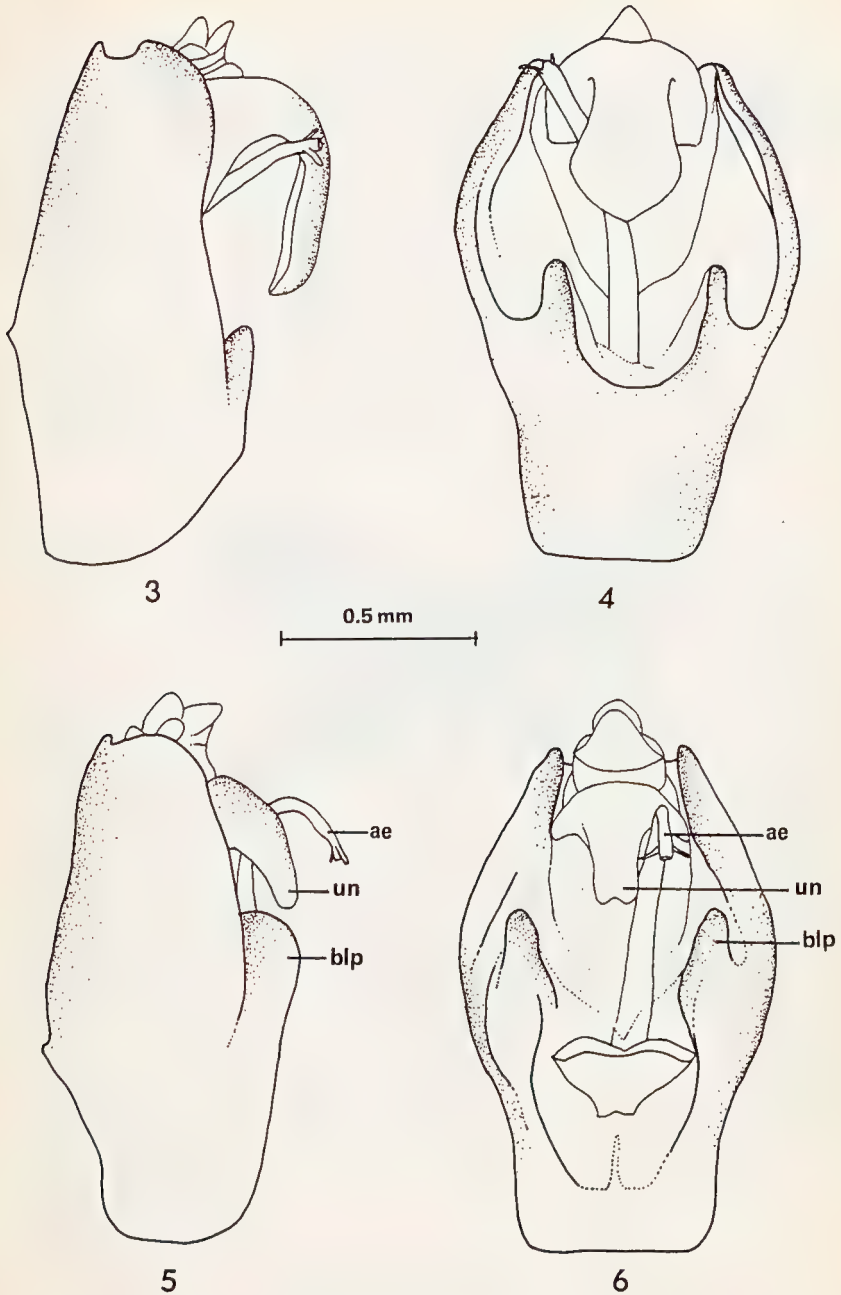
Dimensions. Range and mean (in mm) for 3♂♂ and 1♀. Length of body: ♂ 33.8-34.5 (mean 34.17), ♀ 32.9. Length of fore wing: ♂ 44.4-46.3 (mean 45.03), ♀ 45.3. Width of head: ♂ 13.8-14.7 (mean 14.3), ♀ 14.2. Width of pronotum: ♂ 13.1-13.5 (mean 13.3), ♀ 13.5.

Nymphal exuviae (Fig. 8).

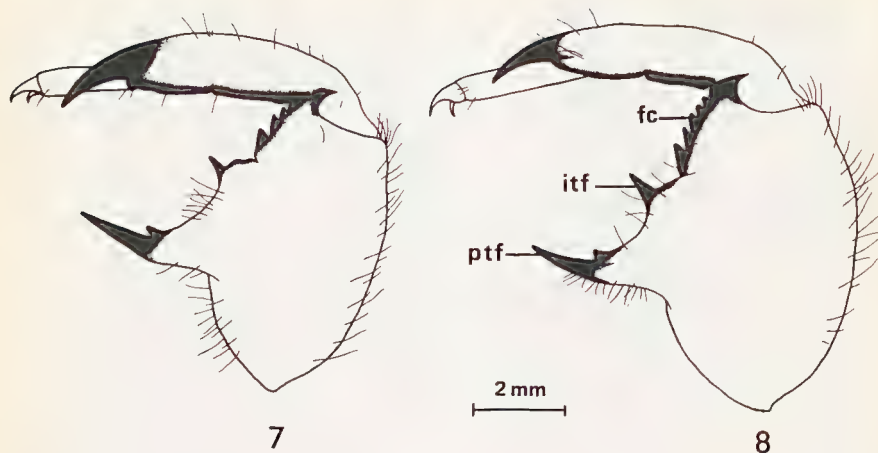
Light golden brown with a high gloss except ventrally, posterior 1/3 or less of abdominal tergites slightly darkened. Fore leg with apical tooth of tibia long and slender, gently curved, extending about 2/3 length of tarsus; posterior tooth of femur long, slender and gently curved; intermediate tooth of femur relatively short; femoral comb with 7 regular teeth. Body length ♂ 27.7-32.2 mm (n = 11); ♀ 29.6-32.3 mm (n = 5).

Etymology

Derived from the Latin *vitta* (= band, ribbon) and refers to the prominent band of colour formed by the pronotal collar.



Figs 3-6. ♂ genitalia: (3) *Macrotristria lachlani* sp.n., lateral view; (4) the same, ventral view; (5) *M. vittata* sp.n., lateral view; (6) the same, ventral view. ae, aedeagus; blp, basal lobe of pygofer; un, uncus.



Figs 7-8. ♂ exuviae, fore leg in lateral view; tarsus, tibiae and femur: (7) *M. lachlani* sp.n.; (8) *M. vittata* sp.n. fc, femoral comb; itf, intermediate tooth of femur; ptf, posterior tooth of femur.

Comments

M. vittata is a distinctive species clearly unlike any other *Macrotristria*; the green pronotal collar contrasting so markedly with the dark body is unique in the genus.

Adults were found in riverine vegetation along the Jardine River. Numerous exuviae were present on tree trunks but adults were uncommon suggesting that emergence had occurred some weeks before.

Distribution

known only from the upper Jardine River in the far north of Cape York Peninsula.

Acknowledgements

Mr Carl Bento took the photographs for figures 1 and 2 and Miss A. de Laurentiis prepared the drawings for figures 3-6.

References

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